

REMARKS

Claims 1-21 remain in the application. Independent claims 1, 7, and 17 have been amended. Applicant wishes to thank the examiner for the indication that claims 11-16 are allowed.

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The office action dated May 21, 2003 has been received and its contents carefully reviewed.

In the Office Action, claim 1 is rejected under 35 U.S.C. § 102(b) as being unpatentable over Japanese Patent No. JP11084361 to Matsute (hereinafter "Matsute"). In the Office Action, claims 1 and 2 are rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,555,114 to Narita (hereinafter "Narita"). In the Office Action, claim 17 is rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 4,032,218 to Sheffer (hereinafter "Sheffer"). Claims 3-6 and 7-10 are rejected over Matsute in view of Japanese Patent No. JP362184055A to Masayuki (hereinafter "Masayuki"). Claims 18-21 are rejected over Sheffer in view of Masayuki. The rejections of these claims is traversed and reconsideration of the claims is respectfully requested in view of the following remarks.

Independent claim 1 is allowable over the cited art in that claim 1 recites a combination of elements including, for example an absorption layer "wherein the light absorption layer aligns cholesteric liquid crystals in the CLC color filter." In the present invention, the color purity is greatly improved because light passing through the color filter layer is absorbed at absorption layer on the substrate and is not reflected. None of the cited references including Matsute or Narita teaches or suggests each and every feature of the claimed invention. Accordingly,

Applicant respectfully submits that independent claim 1 and claims 3-6, which depend therefrom are allowable over the cited references.

Matsute only shows that “an immobilized cholesteric liquid crystal layer 23 and a light absorption layer 24 are successively disposed on the rear surface side of the pixel electrode 5.” (See translation of the abstract.) Matsute is silent as to the absorption layer aligning cholesteric liquid crystals in the CLC filter.

Narita clearly discusses that “an orientation process is applied” prior to applying a cholesteric polymer crystal in a solvent. (See col. 8, li. 4.) Either the flat glass of the substrate is rubbed or preferably “an underlying layer 12 of polyimide resin or the like” is provided and rubbed. (See col. 9, li. 26.) Therefore, Narita fails to teach or suggest an absorption layer “wherein the light absorption layer aligns cholesteric liquid crystals in the CLC color filter,” and actually teaches a completely different method of alignment. Accordingly, Applicant respectfully submits that independent claim 1 and claims 2-6, which depend therefrom are allowable over the cited references.

Independent claim 17 is allowable over the cited art in that claim 1 recites a combination of elements including, for example “rubbing the light absorption layer in one direction,” and “forming a cholesteric liquid crystal (CLC) color filter on the light absorption layer” In the reasons for allowance for claim 11-16, the examiner states that “there is no prior art that teaches a method of forming a lower substrate for use in a reflective liquid crystal display device comprising: rubbing the light absorption layer in one direction; forming a cholesteric liquid crystal (CLC) color filter on the light absorption layer.” These are the two features of claim 17 listed above. Therefore, 17 should be allowed for the same reason claim 11 was allowed. Accordingly, Applicant respectfully submits that independent claim 17 and claims 18-21, which depend therefrom are allowable over the cited references.

Independent claim 7 is allowable over the cited art in that claim 7 recites a combination of elements including, for example an absorption layer “wherein the light absorption layer aligns cholesteric liquid crystals in the CLC color filter.” In the present invention, the color purity is greatly improved because light passing through the color filter layer is absorbed at absorption layer on the substrate and is not reflected. None of the cited references including Matsute or Masyuki teaches or suggests each and every feature of the claimed invention.

Matsute does not have the absorption layer for the reasons previously stated above. Masyuki does not cure this deficiency, as Masyuki is directed to a polyamic acid composition to provide polyimide membranes with good adhesion to substrates. Therefore, Matsute and/or Masyuki fails to teach or suggest an absorption layer “wherein the light absorption layer aligns cholesteric liquid crystals in the CLC color filter.” Accordingly, Applicant respectfully submits that independent claim 7 and claims 8-10, which depend therefrom are allowable over the cited references.

Applicant believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

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Respectfully submitted,

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